REMARKS

The examiner's objections to the drawings are not understood. The examiner states "...a monitor [claim 7] and means to control the temperature [claim 12] must be shown or the feature(s) canceled from the claim(s)." However, the specification states at page 5, lines 10-13 "The electrical inputs include a power supply 36 which supplies current through current meter 38 to connector 30, and voltage *monitor* or volt meter 40 which monitors the voltage applied to the chip 16 or socket assembly 12." (emphasis supplied), and at page 5, line 22, states "The voltage applied to each device is monitored by volt meter 40...". At page 6, lines 20-22, it is stated "The temperature of each device is controlled by individually controlling the temperature of each heat sink responsive to the temperature sensor 24." Also, pipes 22 for supplying and exhausting cooling fluid are shown in Figure 2. Thus, it is believed that both the monitor for the voltage and the means to control the temperature are shown in the drawings, and this objection is respectfully traversed.

The objection to claim 11 has been overcome by amendment to the claim.

The examiner has rejected claims 1-12 under 35 U.S.C. § 102 (e) as being anticipated by Gamache et al, U.S. Patent 6,577,146, hereinafter Gamache et al. This rejection is not thought to be well taken.

Before discussing the claims and reference in detail, it is believed that it would be helpful to give an overview of the invention of the instant application and also of Gamache et al. The prior art is a method where chip-to-heat sink thermal resistance is measured at the beginning of a run. Corrective action, such as cleaning the heat sink or disabling the failing socket, is taken for any device in the tool that fails the thermal resistance test. The prior art does NOT anticipate

"varying the voltage" as one of the potential corrective actions. For example, claim 2 of the subject application states that voltage is varied to maintain current at or below a given value.

Gamache et al supply a constant preprogrammed voltage or voltage pattern to all the devices in the oven during burn in. There is generally an over current protection (fuse) for each device so some devices may shut down during the run. All devices in the oven that are "on" will be at the same preprogrammed voltage. In the present application, it is claimed that by actively changing the voltage in response to a measured value for each part in the burn in oven, in general, each part will be at a different voltage which is the optimum voltage for that specific part. This is not taught nor suggested by Gamache et al who do NOT vary the voltage.

Turning now to the claims in the instant application, claim 1 which is a method claim, and claim 7, which is a counterpart structure claim, require a method and structure for monitoring at least one value selected from the group current, voltage, and power, and varying the voltage to maintain one of said monitored values at or below a given level. Gamache et al determine the theoretical maximum allowable interface resistance between a heat sink and a chip, measure this resistance at levels below burn in and, if the level is too high, the chip is removed from burn in, or the interface is reworked to be lower. In any event, all of the chips are burned in at a preprogrammed voltage or voltage pattern. Voltage is not varied to the chips individually to allow each chip to have its own burn-in pattern.

Prior art is anticipatory only if every element of the claimed invention is disclosed in a single item of prior art in the form literally defined in the claim. Jamesbury Corp. v. Litton Indus. Products, 756 F.2d 1556, 225 USPQ 253 (Fed. Cir. 1985); Atlas Powder Co. v. du Pont,

750 F.2d 1569, 224 USPQ 409 (Fed. Cir. 1984); American Hospital Supply v. Travenol Labs, 745 F.2d 1, 223 USPQ 577 (Fed. Cir. 1984).

"Anticipation requires identity of the claimed process and a process of the prior art; the claimed process, including each step thereof, must have been described or embodied, either expressly or inherently, in a single reference" Glaverbel Societe Anonyme v. Northlake Marketing & Supply, Inc. 45 F. 3d 1550, 1554, 33 USPQ2d 1496, 1498 (Fed. Cir. 1995).

Claims 2 and 8 are dependent upon claims 1 and 7, respectively, and, for the same reasons, are believed to be allowable. Additionally, these claims require that the voltage be controlled to control the current provided. Clearly, this is neither taught nor suggested by Gamache et al and, for this additional reason, these claims are believed to be allowable.

Claims 3 and 9 are dependent upon claims 1 and 7, respectively, and, for the same reasons, are believed to be allowable. Additionally, theses claims require monitoring the voltage to control the power. This is neither taught nor suggested by Gamache et al and, for this additional reason, these claims are believed to be allowable.

Claims 4 and 10 are dependent upon claims 1 and 7, respectively, and, for the same reasons, are believed to be allowable. Additionally, these claims require the device temperature to be monitored and the voltage to *each* device varied to maintain the device at or below a given temperature. Since there is no individual control of the devices in Gamache et al, this cannot be taught or suggested and, for this additional reason, these claims are allowable.

Claim 6 is dependent upon claim 5 and claim 12 is dependent upon claim 7 and, for the same reasons, are believed to be allowable. Moreover, these claims require that each device have a heat sink and the heat sink of each device is varied to maintain each device at or below a given

value. Since Gamache et al do not teach individual control of the device temperature, they not teach individual control, or cannot teach nor suggest the method and structure of these claims.

It is believed that each of the claims now in the application is distinguishable, one from the other, and over the prior art; therefore, reconsideration and allowance of the claims is respectfully requested.

Respectfully submitted,

Date: 3-2-05

By: William N. Hogg

William N. Hogg (Reg. No. 20,156)
Driggs, Lucas, Brubaker & Hogg Co., L.P.A.
CUSTOMER NO. 26679

WNH:cg